

M e m o r a n d u m

To: Department of Finance
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Date: November 6, 2007

From: Department of Technology Services

Subject: FY 2007/08 and FY 2008/09 Billing Rates Adjustment - Phase III

The Department of Technology Services (DTS) is pleased to announce the third phase of billing rate changes for FY 2007/08 and FY2008/09. This is the third step in rate adjustments resulting from consolidating DTS service offerings. The first was announced on July 1, 2006, and DTS rates were reduced by approximately \$16.3 million. The second adjustment addressed additional service areas and provided further decreases to rates, in the amount of annual cost savings to DTS customer of \$26.7 million. This third rate adjustment is for FY 2007/08 as well as FY 2008/09, as DTS nears completion of the consolidation of service offerings and rates. The overall goals of these rate adjustments are to:

- Consolidate rates where there are common or similar services at both DTS data center facilities;
- Eliminate rates, where possible, in an effort to simplify the cost-recovery model for DTS customers; and
- Bring each service to, or as close to, breakeven as possible.

Although the DTS has not yet fully achieved all of these goals, they remain as the DTS' vision for future rate adjustments. Please refer to Attachment A for summary by service category reflecting revenue, expense, and the differences.

The following is a summary of key changes, with effective dates noted:

- **Open Systems Storage:** The addition of two tiers of storage on open systems, Tiers 3 and 4, which will give DTS customers a choice of lower cost storage alternatives for their open systems storage. Tier 3 storage will allow customers to access storage via IP addressing and will be priced at a monthly rate of \$8.00/month/gigabyte. Tier 4 Storage will be for "fixed content" data (that has few changes) normally associated with archived data or scanned images. The Tier 4 storage rates will be \$6.00/month/gigabyte. Both of these offer an alternative to the current open systems storage rate of \$18.35/month/gigabyte. These alternative Tiered Storage rates for open systems will be effective January 1, 2008. The DTS also plans on a similar tiered offering for mainframe storage in the future.
- **Computer Output Microfiche:** A change in the Computer Output Microfiche (COM) rates for both original and duplicate fiche to recover the contract costs for the outsourced vendor and the associated DTS support costs. The new COM rates, which reflect the actual contracted vendor costs and associated DTS support costs, will be \$1.40 for original fiche and \$0.20 for duplicate fiche. These updated billing rates reflect a 48% increase in the revenue required to recover the DTS cost of service provision. This change will be effective July 1, 2008.

- **Disaster Recovery:** A change in the philosophy for Disaster Recovery (D/R) chargeback which recognizes that certain fixed costs are applicable to all D/R customers, regardless of the size of their hot site requirement. The currently defined Disaster Recovery service and the published rates are applicable only to customers reserving capacity at the IBM hot site in Boulder, Colorado. The new rates for D/R services, including the IBM hot site contract and DTS support costs, to be effective July 2008, will be:
 - **CPU Hotsite:** \$16 per MIP which is an 85% decrease from the current rate of \$104 per MIP;
 - **D/R Tape:** \$0.38 which is an 87% decrease from the current rate of \$3.00;
 - **D/R Data Storage (DASD):** \$0.0125 per MB, per month, which is an 82% decrease from the current rate of \$0.07 per MB per month;
 - **Backup Tape:** A new rate of \$0.01 per tape will be added for backup tapes; and
 - **D/R Staffing Support:** All D/R customers will be charged \$3,720 per month for fixed staffing.
 - **D/R Staffing Support – Open Systems:** Add a rate of \$357 per month and a one-time set-up fee of \$4,500 to recover staff costs for D/R Open Systems.

The recently approved DTS Feasibility Study Report for Service Continuity for Mainframe Systems (SCMS) does not affect these rates at this time. Fiscal Year 2009/2010 will include SCMS as a service offering. Customers currently subscribing to the DTS D/R hot site service will then have the opportunity to determine whether their data is appropriate to move to the SCMS service offering.

- **Secure File Transfer:** A reduced charge for offering Secure File Transport Service which offers the highest standards of encryption and authentication for sensitive file transfers. The current DTS charge for Secure Transport Service is billed at \$55.53 per named user account, with an additional charge of \$55.53 for each GB or fractional amount above the one gigabyte base rate. The new Secure File Transport Service will be \$16.00 per named user account, per month, with an additional charge of \$13.00 for each gigabyte or fractional amount above the base five gigabyte rate. This change will be effective January 2008.
- **Training Center:** A realignment of services and rates intended to bring the DTS Training closer to full cost recovery status, rates to be effective July 2008.
- **Methodology for zAAP Processors:** IBM System z Application Assist Processors (zAAP) are used to run Java workload under z/OS (mainframe CPU). zAAP was recently installed in August 2007. DTS proposes to reduce the current CPU hourly rate of \$1,044, for zAAP processor use only, by 46%, to \$564/hour. Since DTS does not incur any additional software license charges for zAAP Processors the software costs are being subtracted out of the current published CPU hourly rate. This change will be effective January 2008.

When all of the above rate changes are implemented, the result of these rate changes will be a revenue increase to DTS of less than 1% for FY 07/08, and an increase of less than 1% for FY 08/09. These figures are based on actual customer usage during FY 2006/07.

Please refer to the attached service area rate methodology descriptions and cost analysis spreadsheets for more detail regarding each of these rate changes.

If you should have any questions, please contact Colleen Field, Manager, Rates and Cost Recovery at (916) 739-7904 or by email at colleen.field@dts.ca.gov.

P.K. Agarwal, Director
Department of Technology Services

Attachments

DEPARTMENT OF TECHNOLOGY SERVICES
FY 2006/07 REVENUE/EXPENSE DETAIL

ATTACHMENT A

FY 2006/07 Actuals				
Service Area	Revenues	Expenditures	Difference	%
Mainframe Processing	\$91,555,506	\$63,968,045	\$27,587,461	43%
Data Storage	\$22,985,942	\$20,885,542	\$2,100,400	10%
Outsourced Services	\$1,756,555	\$4,606,683	(\$2,850,128)	-62%
Statewide E-Mail	\$2,655,529	\$3,444,354	(\$788,825)	-23%
Mid-Range Processing Services	\$16,333,358	\$27,264,631	(\$10,931,273)	-40%
HRIS	\$263,362	\$355,522	(\$92,160)	-26%
Customer Projects	\$1,224,727	\$881,516	\$343,211	39%
Training Center	\$1,592,071	\$1,863,664	(\$271,593)	-15%
Operational Recovery	\$2,398,620	\$2,661,122	(\$262,502)	-10%
Network Communication Services	\$30,521,729	\$36,846,624	(\$6,324,895)	-17%
COEMS	\$533,942	\$328,593	\$205,349	62%
Personnel Services	\$7,882,040	\$9,896,980	(\$2,014,940)	-20%
Dedicated Pass-Through Billing	\$23,324,734	\$23,722,684	(\$397,950)	-2%
Total	\$203,028,115	\$196,725,960	\$6,302,155	3%

Department of Technology Services
Rate Package #3
Fiscal Year 2007/2008
Proposed Effective Date: January 2008
Rate Change Detail

Service Name: Open System Storage Tier 3 – IP Addressable Storage

Comp Code: S210

Cost Center: 301

Issue/Reason for Change:

The DTS is endeavoring to offer customers alternative and less costly storage technologies that are suited to specific customer needs.

Description of Service Offering:

The Tier 3 open system storage offering will allow users to access storage via the internet protocol addressing and avoid the need for direct access. This will allow servers housed at a DTS computer room and servers housed remotely to access storage pools managed by DTS staff.

Service Offering Highlights

The following is a list of features:

1. the ability to provide storage to servers located both within any of the DTS raised floor environments or located remotely
2. a regularly scheduled backup of the data, for disaster recovery purposes or restoration of accidental file deletion, to DTS managed processes
3. the ability to rapidly deploy or expand a pool of storage in a managed, monitored, and secure environment

Current Billing Method:

DTS does not currently offer this level of storage service.

Proposed Open System Storage Tier 3 Rate

Monthly charge of \$8.00 per gigabyte

Customer Impact:

The tier 3 service provides our customers with a more economical service compared to the current high availability storage service offering which is \$18.35 per GB per month. The rate for Tier 3 Open System Storage is over 40% lower than the current rate for high availability storage. Not all storage may qualify for this type of service but customers now will have a choice for data that is less critical.

Department of Technology Services
Rate Package #3
Fiscal Year 2007/2008
Proposed Effective Date: January 2008
Rate Change Detail

Service Name: Open System Storage Tier 4 – Content Addressable Storage

Comp Code: S211

Cost Center: 301

Issue/Reason for Change:

The DTS is endeavoring to offer customers alternative and less costly storage technologies that are suited to specific customer needs.

Description of Service Offering:

The Tier 4 storage offering is for customers with "fixed content" data normally associated with archived data or scanned images. The customers will be required to develop a programming interface to store/retrieve data to/from the storage device. The device will be accessed via internet protocol addressing.

Service Offering Highlights

The following is a list of features:

1. the ability to provide storage to servers located both within any of the DTS raised floor environments or located remotely
2. the automatic replication of data, for service continuity purposes, to a second storage device located in an alternate DTS raised floor environment
3. the ability to set retention management policies to ensure the availability of data in accordance with business needs

Current Billing Method:

DTS does not currently offer this level of storage service.

Proposed Open System Storage Tier 4 Rate

Monthly charge of \$6.00 per gigabyte

Customer Impact:

The tier 4 service offering provides our customers with a more economical service compared to the current high availability storage service offering which is \$18.35 per GB per month. The rate for Tier 4 Open System Storage is over 65% lower than the current rate for high availability storage. Not all storage may qualify for this type of service but customers now will have a choice for data that is less critical.

Department of Technology Services
Rate Package #3
Fiscal Year 2007/08
Proposed Effective Date: July 2008
Rate Change Detail

Service Name: Computer Output Microfiche (COM)
Comp Code: P401 & P402
Cost Center: 040

Issue/Reason for Rate Change:

DTS is proposing to increase the rates for Original Microfiche by 36% and Duplicate Microfiche by 97% and add a rate of \$1.33 for Priority Processing requests. Revenues and expenses were compared and this service is currently under-recovering by 92%. FY 07/08 under-recovery is projected to under-recover by 36%. The purpose for this rate change is to recover the actual vendor contract costs plus DTS staff support costs and expenses.

Summary/Description of Service Offering:

The DTS provides customers with Computer Output Microfiche (COM) services. COM is an inexpensive and efficient means of archiving information for long-term storage. COM allows customers to transfer up to 269 pages of printed output to a single 4" by 6" 105mm microfiche, which remains readable for many years. DTS contracts for this service with an outside vendor. The COM is picked up from the outsource vendor via DTS courier service and returned to DTS campuses and then processed through the Chain-of-Custody procedures. If a DTS customer also uses the DTS courier service contract, then DTS will send the customers their COM via the DTS courier. Otherwise, customers may retrieve their COM directly from DTS, by sending their own courier. COM services are available 24 hours a day, 7 days a week.

COM Priority Processing:

Priority processing is a job that is placed in front of all other jobs in the job queue and will be given first priority. A customer may request priority processing from DTS. These jobs will be assessed the priority processing fee if/when DTS calls the outsource vendor and specifies that a special job is coming and request that the job be placed first in queue and processed immediately.

Current Billing Method:

Customers are currently charged usage multiplied times the published rate for Original and Duplicate microfiche.

Current Contracted Vendor Rates:

Original Microfiche: \$0.98 plus tax = \$1.06
Duplicate Microfiche: \$0.098 plus tax = \$0.11
Priority Processing : \$1.23 plus tax = \$1.33

Proposed Rates :

Service	Proposed Rates	Current Rates	Net Change
Original Microfiche	\$1.40	\$1.03260	36%
Duplicate Microfiche	\$0.20	\$0.1014	97%
Priority Processing	\$1.33	\$0	100%

Customer Impact:

Please see attached spreadsheet detail by customer.

Original Microfiche: An increase of 36%

Duplicate Microfiche: An increase of 97%

Priority Processing: An increase of 100% (CalTrans is the only customer who uses this service, at this time).

Revenue Impact:

These rate changes will increase Original Microfiche revenue by 36% and Duplicate Microfiche revenue by 97%. This results in an overall annual revenue increase of \$468,069, or an overall 48% revenue increase for COM services.

Department of Technology Services
Rate Package #3
Fiscal Year 2007/08
Effective Date: July 2008

Service Name: Disaster Recovery

Comp Codes: (R105) Disaster Recovery – CPU Hot Site
(R102) Disaster Recovery Tape
(R103) Disaster Recovery Data Storage (DASD)

Cost Center: 186

Issue/Reason for Change: The goal of the proposed rate changes for Disaster Recovery is to ensure that the chargeback to each customer accurately reflects the overall costs of DTS to provide the service. The current rate structure uses a flat rate per CPU MIPS required by each customer and a flat rate for Disaster Recovery Storage. In addition, DTS has a rate for Tapes. DTS is proposing to realign the cost for Fixed Staffing and Operating System (O/S) and hot-site installation and support. DTS is also proposing to reduce the CPU MIPS, Disaster Recovery storage rates and Tape rates.

Summary of Proposed Changes:

Reduce CPU Hot Site rate by (85%)
Reduce Disaster Recovery Data Storage (DASD) rates by (82%)
Reduce Disaster Recovery Tape rates by (87%)
Add a cost for Fixed Staffing
Add a rate for Backup Tapes
Add a rate for staff support for Open Systems

Description of Service Offering:

DTS promotes business continuity planning and coordinates and assists customers with disaster recovery requirements. The DTS offers consulting to customers to develop, implement, and test their recovery plans through the IBM contract for Boulder, Colorado hot-site readiness. Hot-site processing is offered to customers for their critical applications. DTS arranges for a hot-site processing location to those customers requiring restoration of services within 72 hours after a disaster. The DTS works with the customer to define the hot-site environment (platform, software, database, storage, backup and restore, output, and other needs) and obtains a quote from the contracted vendor. DTS also offers data storage to customers so that the DTS and customers can complete failover tests. Off-site storage is offered to customers for storage of their vital electronic data processing files away from their primary business location. In the event of a disaster that affects their primary business location, customers will be able to restore vital electronic records and recover processing capabilities while restoring normal business functions. Depending upon customer requirements, the DTS will provide off-site storage at the DTS, another Sacramento location or outside of the Sacramento area.

Summary of Chargeback Methodology and Reason for Change:

The goal of the proposed Disaster Recovery (D/R) Rate methodology is to ensure that the chargeback to each customer accurately represents the overall costs to DTS of providing the service. The current rate methodology uses a flat rate per CPU MIPS required by each customer and a flat rate per storage (gigabyte) requirement for each

D/R customer at the hot site. In addition, DTS has rates for tape and storage requirements for the D/R related data identified by each customer.

Currently customers with lower CPU MIPS and storage hot site requirements are charged very little, while customers with considerably more CPU MIPS and storage requirements are paying significantly more.

The reality is that all customers require certain base services, including the work done by staff. This includes loading of the Operating System (O/S), network access, work of the D/R staff from different units throughout DTS including pre and post-exercise meetings, service desk assistance during exercises, etc. All these services would have to be provided whether there were twenty customers or one customer, regardless of MIPS and storage requirement levels.

The D/R planning staff and Rates and Cost Recovery staff concluded that the cost of these services (defined in this document as Fixed Costs) should be equally divided among the current number of customers, and that the cost of these "Fixed Costs" would be redistributed annually based on the number of customers. Adding the Fixed Costs into the CPU MIPS and storage rates at the hot site does not make logical sense because the real Fixed Costs are equivalent for each customer, regardless of their CPU MIPS and storage requirements.

At the same time, moving the "Fixed Costs" into their own chargeback method, takes some of the pressure off the larger customers who would otherwise have significant costs that would be out of proportion to the real costs of providing the service.

Fixed costs consist of those costs that should be evenly divided equally among the D/R customers. Variable costs are those which should be adjusted based on the capacities required/used. Because the work of loading and maintaining the O/S is required regardless of the number of customers or their required hot site capacity, it would be most accurately and fairly divided equally among the D/R customers (charged as a fixed cost).

Because the work required by Database and Storage Administration staff is most accurately a reflection of the amount of storage being used, it would most fairly be charged as a percentage of storage.

Again, our goal is to accurately reflect the real costs to provide the service within the rate methodology. To the extent that a given customer sees a rate increase, it is the product of a more accurate rendering of those real costs, and not an artificial attempt to shift costs from one customer to another.

Current Billing Method:

Currently DTS bills for CPU Hot Site MIPS, D/R Tape and D/R Storage (DASD). DTS will continue to bill for CPU MIPS, Tape and D/R Storage (DASD), however, we propose adding a rate for Backup Tapes and a flat rate for D/R Fixed Staffing.

Proposed Rate Changes:

Service	Proposed Rate	Current Rate	Net Change
CPU Hot Site	\$16 per MIP	\$104 per MIP	(85%)
Disaster Recovery Tape	\$.38 per Tape	\$3.00 per Tape	(87%)
Disaster Recovery Data Storage (DASD)	\$.0125 per MB	\$.07 per MB	(82%)
Disaster Recovery Fixed Staffing	\$3,720 per month	\$0	100%
Backup Tapes	\$.01 per MB	\$0	100%
Disaster Recovery – Open Systems Staff Support	\$357 per month	\$0	100%
Disaster Recovery – Open Systems One-time Set-up Fee	\$4,500 One-time cost	\$0	100%

Impact on DTS Revenue:

These rate changes will increase Disaster Recovery revenues by \$1,014,397 annually or 42%.

Department of Technology Services
Rate Package #3
Fiscal Year 2007/2008
Proposed Effective Date: January 2008
Rate Change Detail

Service Name: Secure File Transport Service (SFT)
Comp Code: I116
Cost Center: 083

Issue/Reason for Rate Change:

The current service offering is perceived as more expensive by DTS customers than alternative methods. The customers have indicated they would like to see a DTS offering with a more competitive billing rate. Due to increases in demand and economies of scale, the DTS can offer a more competitive rate.

Summary/Description of Service Offering:

The Secure File Transport Service provides customers the ability to transport data files over the public internet in a manner that is secure, reliable and efficient. The service uses Tumbleweed SecureTransport® software which allows users to meet the current standards of encryption and authentication required by State and Federal agencies for the transport of personal, confidential, and sensitive information, such as health and financial records. Additionally, it features automatic email notification when files are successfully or unsuccessfully transmitted, includes a high-availability infrastructure to ensure continual accessibility, and provides industry standard encryption of data in transit and at rest while moving to, through, or from the SFT environment.

The customer will be charged one-time set up fees for the initial research and analysis and two optional upgraded service levels. There is also a Secure Transport Windows Client Application that a customer can select. The detail fees for these are noted below:

Service	Proposed Rates	Current Rates	Net Change
Monthly Fee per Named User Account	\$16.00 per named user account, includes 5 GB transfer	\$55.53 per named user account, includes 1 GB transfer	(71%)
Transmission	\$13.00 per each additional GB or fractional amount transferred	\$55.53	(76%)
One-Time Set-up Fee to include a required customer research and analysis (est. 2 hours)	\$115 per hour	\$0	100%
Secure Transport Windows Client Application	\$300	\$0	100%

Customer Impact:

Current Secure File Transport Service customers will see a 71% decrease in the base monthly subscription charges and a 76% decrease in the surcharge cost for data transmissions the 5 GB included in the base subscription.

Revenue Impact:

FY	Revenue	Expense	Difference
06/07	\$3,044	\$139,028	(\$135,984)
Projected 07/08	\$338,140	\$406,518	(\$68,378)

% Change in Revenue: + 99.9%

***Department of Technology Services
Rate Package #3
Fiscal Year 2007/2008
Proposed Effective Date: July 2008
Rate Change Detail***

Service Name: Training Center Services

Comp Code: D110

Cost Center: 180 – Training Center

Issue/Reason for Change:

The reason we are proposing a rate change for this service is the Training Center has experienced an under-recovery for several years. This new structure will allow DTS to recover costs while still remaining a low-cost alternative for IT training and conference room rentals.

Description of Service Offering:

The Department of Technology Services (DTS) Training & Event Center provides professional low-cost information technology and management training to our customers in state, federal and local government agencies

Training Classes:

The DTS Training & Event Center offers excellent technical training related to information systems and telecommunication to state, federal and local government agencies. It also provides a year long program on Information Technology Managers Academy (ITMA) that focuses on developing the skills and knowledge that makes an effective IT executive needed for the 21st Century.

Room Rental:

The DTS Training & Event Center offers classroom and conference room rentals to government agencies only. The room can accommodate groups of 8 – 131 participants. The room rental price ranges from \$50.00 to \$400.00 per day.

Current Billing Method:

Fee structure was developed to recover only the cost of the training vendor's contract, other operating or overhead costs were not added to the fee.

Proposed Rate:

Fee structure will recover the cost of the training vendor's contract, staff costs and overhead to allow the Training Center to break even. This increases the class enrollment cost by approximately 21%.

Customer Impact:

The only impact to the customer is a 21% increase in class costs if a customer elects to use the service. The impact to each department is based solely upon their usage which varies from year to year.

Department of Technology Services
Rate Package #3
Fiscal Year 2007/2008
Proposed Effective Date: January 2008
Rate Change Detail

Service Name: IBM System z Application Assist Processor (zAAP) CPU
Comp Code: C110
Cost Center: 001

Issue/Reason for Change:

The introduction of the zAAP processors represents a lower-priced CPU engine that processes Java Websphere applications at a faster pace than existing DTS CPU engines. The zAAP processor also will require minimal software because it is specialized. The DTS proposes a lower rate for zAAP processing because of the minimal software requirement and because of the reduced hardware expenses associated with this engine.

Summary/Description of Service Offering:

IBM System z Application Assist Processor (zAAP) is the zSeries Application Assist Processor, a mainframe processor dedicated to running Java workloads under z/OS. A zAAP engine contains the same underlying hardware as any other mainframe engine. However, IBM uses microcode to limit code execution to Java workloads only. Additionally, IBM does not change the "software model" or MSU rating on its mainframes with the installation of zAAPs. Consequently DTS does not incur any additional software license charges for the zAAP. By not incurring a proportional increase in software expenses with the increase in processing capacity DTS is able to offer Java workload processing on the zAAP at a fraction of the rate of the general purpose CPU.

Current Billing Method:

DTS' CPU charge (PC) is calculated as processor time (PT) multiplied by the CPU rate (R). $PC = PT \times R$.

The System Management Facility (SMF) Monitor captures MVS CPU utilization information and an SMF record is written for each transaction at the job step level. The SMF record is passed to the MVS Integrated Control System (MICS) billing system where the SMF records are formatted, sorted, summarized and processed. The CPU execution time is normalized to on the IBM 2064-116 CPU and billed at the CPU resource rate.

Service	Proposed Rates	Current Rates	Net Change
z/OS CPU	\$1,044 per hour	\$1,044 per hour	0%
zAAP	\$564 per hour	\$1,044 per hour	(46%)

Customer Impact:

Current customers running Java workloads under z/OS general CPU will see a 46% decrease in their CPU charges related to Java workloads.